

First, an element, when attached onto a substrate by adhesive, is directly covered by an optically conductive path. Because of this, light emitted from the element can be transmitted to the optically conductive path essentially without any loss.

On the other hand, according to Saini, an element chip is embedded in a substrate. Thus, between the element and the optically conductive path, a boundary face exists, which is formed of a top surface of the element and a bottom surface of the optically conductive path. Because of this, due to the difference in refraction indices between the material forming the element and the material forming the optically conductive path, light reflection occurs at the boundary face, and in the path of light from the element to the optically conductive path, light loss occurs and/or increases.

Secondly, when the element is attached to a flat surface by adhesive, flatness of the surface can be maintained. However, according to Saini, the element is molded, so the chip surface is not flat, and light emitted from the element is scattered at the chip surface, decreasing the efficiency of light emission.

Additionally, when using adhesive, the element can be formed so as to be attached to a substrate. Thus, a device can be easily formed, and the manufacturing cost of the device can be decreased. Saini's "embedding," on the other hand, is costly and more difficult to manufacture.

In view of the above, Saini's disclosure of "embedding" does not render obvious the subject matter recited in claim 1, and claims 3, 15-21, 32 and 33 depending therefrom, because Saini's "embedding" does not have the advantages associated with the use of an adhesive, as discussed above. Thus, the subject matter recited in claim 1, and claims 3, 15-21, 32 and 33 is not obvious over Saini. Accordingly, withdrawal of the rejection of claims 1, 3, 15-21, 32 and 33 under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Gang Luo  
Registration No. 50,559

JAO:GXL/sqb

Date: August 18, 2006

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

**DEPOSIT ACCOUNT USE  
AUTHORIZATION**  
Please grant any extension  
necessary for entry;  
Charge any fee due to our  
Deposit Account No. 15-0461